TUBELESS ACTUATOR WITH REDUCED SECONDARY AIR GAP <u>Abstract of the Disclosure</u>

A tubeless actuator includes a frame in which a primary plate and a secondary plate are disposed. A bobbin is disposed within the frame between the primary plate and the secondary plate. The bobbin is keyed to the secondary plate in order to maintain the alignment between the bobbin and the secondary plate.

Moreover, the plunger slides in direct contact with the bobbin.